



PATENT
Customer No. 22,852
Attorney Docket No. 03327.2333-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Yasuhiro OKUMOTO et al.) Group Art Unit: 1792
Application No.: 10/539,246) Examiner: Empie, Nathan H.
Filed: May 9, 2006) Confirmation No.: 9261
For: PROCESSING METHOD AND)
PROCESSING APPARATUS)

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Commissioner for Patents
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Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request a pre-appeal brief review of the Final Office Action mailed August 4, 2008 and the Advisory Action mailed November 20, 2008. This Request is being filed concurrently with a Notice of Appeal.

I. Requirements For Submitting a Pre-Appeal Brief Request for Review

Applicants have met each of the requirements for a pre-appeal brief review of rejections set forth in an Office Action. The application has been at least twice rejected. Applicants have filed a Notice of Appeal with this Request, and have not yet filed an Appeal Brief. Applicants submit this Pre-Appeal Brief Request for Review that is five (5) or less pages in length and sets forth legal or factual deficiencies in the rejections. See Official Gazette Notice, July 12, 2005.

II. Status of the Claims

In the Final Office Action, the Examiner rejected claims 1-4, 6-9, and 11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,726,920 to Chen et al. ("Chen"); and rejected claims 5 and 10 under 35 U.S.C. § 103(a) as being unpatentable over *Chen* in view of JP 2000-269108 A to Tamaki et al. ("Tamaki").

III. Rejections under 35 U.S.C. § 103(a) are improper

Applicants respectfully traverse the rejection of claims 1-4, 6-9, and 11 under 35 U.S.C. § 103(a). A *prima facie* case of obviousness has not been established.

Claim 1 recites a method comprising, for example:

a continuity determination step of determining whether or not defective determination is made more than once and consecutively when said processed state has been determined to be defective through said processing state determination step; and

a processing control step of controlling processing such that processing of said member continuously performed through said processing step is stopped when a defective determination is determined to have been made more than once and consecutively through said continuity determination step,

(emphasis added). *Chen* discloses "a system for determining quickly and with a fair degree of accuracy whether unusual numbers of failures are occurring at final water sort testing" (col. 3, lines 57-60). *Chen* discloses a database computer 150 that "can use data gathered over time from various sources (125, 125') to determine that an excessive number of failures are being detected" (col. 9, lines 8-10). According to *Chen*, "database computer 150 can use data gathered over time from various sources (125, 125') to determine that an excessive number of failures are being detected and

that there is a high probability (e.g. better than 90%) that the problem lies upstream in a given fabrication line 101a . . ." (col. 9, lines 6-11).

The Examiner continues to assert that "database (190) tracks the progress of each wafer . . . [and] computer (150) tracks the progress of each wafer over time. Based on such teachings, it would have been obvious . . . to have made a defective determination more than once and consecutively, and to have stopped processing when defective determination was made more than once and consecutively" (Final Office Action at page 8). This is not correct.

The Examiner is taking an impermissibly broad and incorrect interpretation of *Chen*. Applicants continue to assert that determining "that an excessive number of failures are being detected," as recited in col. 9, lines 8-9 of *Chen*, does not teach or suggest consecutive defects. Even assuming that computer 150 tracks the progress of each wafer, *Chen* only discloses "an excessive number of failures." An "excessive number of failures" does not suggest "consecutive failures."

Applicants also note that a "defective determination" made "more than once and consecutively" is significant. As recited at page 25, lines 1-10 and page 25, line 18 - page 26, line 3 of the specification:

In order to stop processing and perform inspection, there is required consumption of lots of efforts and much time, such as those required to change the internal atmosphere to the atmosphere and again return the internal atmosphere to the vacuum environment. However, when anomalous processing of low continuity, such as that mentioned above, has arisen, stoppage of processing is inefficient. Even when inspection or the like is performed, the anomaly is not attributable to a failure or the like. Therefore, the inspection will become totally useless.

As a matter of course, when a failure or the like has actually arisen in the system, a defective determination will be made continuously, and

hence processing is terminated. In this case, losses due to the failure are merely "n" wafers and the time required by the processing.

As mentioned above, according to the present embodiment where, when anomalous processing has arisen, processing is suspended after continuity of the anomalous processing has been ascertained, useless stopping time and efforts, which are required for inspection, can be eliminated, so that high productivity can be embodied. (emphasis added).

Termination based on consecutive defects provides improved processing speed and efficiency, resulting in high productivity. Such improvements are significant. *Chen* is silent regarding processing that is “stopped when a defective determination is determined to have been made more than once and consecutively through said continuity determination step.”

Contrary to the Examiner’s position, determining excessive failures cannot constitute stopping processing that is stopped when a “defective determination” is made “more than once and consecutively.” The Examiner’s position that tracking the progress of wafers over time discloses consecutive failures is an impermissibly broad interpretation of the teachings of *Chen*. One of ordinary skill would not equate excessive failures with consecutive failures.

Therefore, *Chen* does not teach or suggest the claimed combination of elements including “a processing control step of controlling processing such that processing of said member continuously performed through said processing step is stopped when a defective determination is determined to have been made more than once and consecutively through said continuity determination step,” as recited in claim 1.

Accordingly, *Chen* fails to establish a *prima facie* case of obviousness with respect to claim 1. Thus, claim 1 is allowable for at least these reasons, and claims 2-4 are also allowable at least due to their depending from claim 1. Independent claims 6

and 11, though of different scope from claim 1, recite limitations similar to those set forth above with respect to claim 1 and is thus allowable over *Chen* for at least the same reasons discussed above in regard to claim 1. Claims 7-9 are also allowable at least due to their depending from claim 6.

Regarding the rejection of claims 5 and 10, dependent from claims 1 and 6, respectively, the Examiner relies on *Tamaki* for allegedly disclosing "a management system for a semiconductor fabrication device" (Final Office Action at page 7). Even assuming this allegation is correct, which Applicants do not concede, *Tamaki* fails to cure the deficiencies of *Chen* discussed above.

Therefore, no *prima facie* case of obviousness has been established, and claims 5 and 10 are also allowable over *Chen* and *Tamaki*.

In view of the foregoing, Applicants respectfully request reconsideration of the application and withdrawal of the rejections. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: December 3, 2008

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